

## WEST

 

L10: Entry 4 of 8

File: USPT

Jul 20, 1976

DOCUMENT-IDENTIFIER: US 3970422 A

TITLE: Method of improvement in coloring glass fabrics

## DEPR:

The fabric was then printed with a printing paste comprising 60 parts by weight of a 15 per cent guar gum solution (Maypro Gum NP; trade mark of Mayhall, Inc.), 5 parts by weight of Deorlene Fast Red 2GL and 35 parts by weight of water by means of an autoscreen printing machine operating at a printing speed of 10 meters per minute, steamed for 20 minutes at 100.degree. C., washed with water and dried. The printed glass fabric was found to have a clear shade and a favorable hand.

WEST

## Freeform Search

**Database:**

**Term:**

**Display:**  **Documents in Display Format:**  **Starting with Number**

**Generate:**  Hit List  Hit Count  Image

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## Search History

Today's Date: 9/11/2000

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	l9	8	<u>L10</u>
USPT	(l1 or l2 or l3) same (l4 or l5 or l6 or l7 or l8)	8	<u>L9</u>
USPT	(carboxymethyl or carboxyalkyl or carboxyethyl or carboxypropyl or carboxybutyl) adj cellulose	25393	<u>L8</u>
USPT	carboxymethylcellulose or carboxyalkylcellulose or carboxyethylcellulose or carboxypropylcellulose or carboxybutylcellulose	23433	<u>L7</u>
USPT	(hydroxyalkyl or hydroxymethyl or hydroxypropyl or hydroxyethyl or hydroxybutyl) adj cellulose	18180	<u>L6</u>
USPT	hydroxyalkylcellulose or hydroxymethylcellulose or hydroxypropylcellulose or hydroxyethylcellulose or hydroxybutylcellulose	12051	<u>L5</u>
USPT	gum or pectin or alginate or starch	131752	<u>L4</u>
USPT	(anilan or aniline or astrazon or calcozine or acrylic or crypur or deorlene or maxilon or melacril or sandocryl or synacril) adj4 red	315	<u>L3</u>
USPT	11055	61	<u>L2</u>
USPT	basic adj red adj ("22" or "31")	45	<u>L1</u>

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS  
RN 12270-28-9 REGISTRY  
CN C.I. Basic Red 54 (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN **Deorlene Fast Red 2GL**  
CN Maxilon Red 2GL  
CN Sandocryl Red B 2GLN  
MF Unspecified  
CI MAN  
LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, TOXLIT

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

(FILE 'HOME' ENTERED AT 08:32:03 ON 11 SEP 2000)

FILE 'REGISTRY' ENTERED AT 08:32:37 ON 11 SEP 2000

L1 0 SEA HYDROXYETHYLCELLULOSE/CN  
L2 1 SEA HYDROXYETHYL CELLULOSE/CN  
L3 1 SEA HYDROXYPROPYL CELLULOSE/CN  
L4 2 SEA CARBOXYMETHYL CELLULOSE/CN  
L5 1 SEA GUAR GUM/CN  
L6 0 SEA SCLEROGLUCAM GUM/CN  
L7 0 SEA SCLEROGLUCAN GUM/CN  
L8 1 SEA XANTHAN GUM/CN

FILE 'CAPLUS' ENTERED AT 08:34:47 ON 11 SEP 2000

L9 32396 SEA L2 OR L3 OR L4 OR L5 OR L8  
L10 131834 SEA GUM OR GUMS OR PECTIN? OR ALGINATE? OR STARCH?  
L11 3270 SEA HYDROXYALKYLCELLULOSE? OR HYDROXYMETHYLCELLULOSE? OR  
HYDROXYETHYLCELLULOSE? OR HYDROXYPROPYLCELLULOSE? OR

HYDROXYBUT

YLCELLULOSE?

L12 15226 SEA (HYDROXYALKYL OR HYDROXYMETHYL OR HYDROXYETHYL OR  
HYDROXYPR

OPYL OR HYDROXYBUTYL) (5A) CELLULOSE?

L13 3557 SEA CARBOXYALKYLCELLULOSE? OR CARBOXYMETHYLCELLULOSE?  
L14 6168 SEA (CARBOXYALKYL OR CARBOXYMETHYL) (A) CELLULOSE?  
L15 60363 SEA HAIR? OR KERATIN?  
L16 11228 SEA (BASIC OR CATIONIC) (5A) DYE?  
L17 288 SEA L15 AND L16  
L18 42 SEA L17 AND (L9 OR L10 OR L11 OR L12 OR L13 OR L14)

L18 ANSWER 10 OF 42 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1999:344834 CAPLUS  
 DOCUMENT NUMBER: 130:356882  
 TITLE: Fluidized polymer suspensions of cationic polysaccharides in emollients and use thereof in preparing personal care compositions  
 INVENTOR(S): Burdick, Charles Lee; Hofman, Hans; Melbouci, Mohand; Debruin, Jacobus Johannes  
 PATENT ASSIGNEE(S): Hercules Incorporated, USA  
 SOURCE: PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9925312	A1	19990527	WO 1998-US24531	19981117
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9914161	A1	19990607	AU 1999-14161	19981117
EP 1032358	A1	20000906	EP 1998-958042	19981117
R: DE, ES, FR, GB, IT, NL				
US 6113891	A	20000905	US 1998-200350	19981120
PRIORITY APPLN. INFO.:			US 1997-66199	19971119
			WO 1998-US24531	19981117

AB Stable fluidized polymer suspensions contain cationic polysaccharide, stabilizing agent and emollient. The preferred cationic polysaccharides are cationic guar and cationic hydroxypropyl guar, and preferred emollients are hydrocarbons, silicone oils and esters. Processes for prep. personal care compns. utilizing the fluidized polymer suspensions are also disclosed. Using the fluidized polymer suspensions in the processes provides the advantages of more rapid dissoln. and avoidance of lumps and gels when compared to using dry, powd. cationic polysaccharides.

A fluidized polymer suspension of cationic guar was prep'd. by mixing 3.4 parts of Tixogel MP100 clay, 48.2 parts of Marcol 52 CX mineral oil, 0.37 parts of sorbitan trioleate (Montane 85), and 3.03 parts of ethoxylated sorbitan trioleate (Montanox 85), and adding 45 parts of cationic guar (N-Hance 3000). The suspension had a viscosity of 2500 cps and it was used for prepn. of a conditioning shampoo.

REFERENCE COUNT: 5  
 REFERENCE(S):  
 (1) Aqualon Co; EP 0455073 A 1991  
 (2) Demasi, D; US 4453979 A 1984 CAPLUS  
 (3) Hatfield, J; US 4566977 A 1986  
 (4) Pickens, P; US 4312675 A 1982 CAPLUS  
 (5) Rhone Poulenc Inc; WO 9746606 A 1997

ST polymer suspension emollient stabilizing agent cosmetic; cationic polysaccharide suspension cosmetic hair prepn  
 IT Antiperspirants  
 Cationic surfactants

Conditioning shampoos  
Cosmetics  
Deodorants  
Emollients  
Hair conditioners  
Hair dyes  
Nonionic surfactants  
Pigments (nonbiological)  
Shampoos  
Skin creams  
Stabilizing agents  
Sunscreens  
Surfactants  
    (fluidized polymer suspensions of cationic polysaccharides in  
    emollients for personal care compns.)

IT Anionic polyelectrolytes  
Cationic polyelectrolytes  
    (hair styling; fluidized polymer suspensions of cationic  
    polysaccharides in emollients for personal care compns.)

IT Hair gels  
    (styling; fluidized polymer suspensions of cationic polysaccharides in  
    emollients for personal care compns.)

IT 9000-30-0, Guar 39421-75-5, Hydroxypropyl guar 39465-11-7,  
Hydroxyethyl guar  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
    (cationic; fluidized polymer suspensions of cationic polysaccharides  
in  
    emollients for personal care compns.)

IT 79-10-7D, Acrylic acid, esters, polymers 111-02-4, Squalene 471-34-1,  
Calcium carbonate, biological studies 7631-86-9, Silica, biological  
studies 9002-88-4 9003-27-4, Polyisobutene 9004-34-6D, Cellulose,  
ethers 9004-62-0, **Hydroxyethyl cellulose**  
9005-63-4, Polyoxyethylene sorbitan ester 9005-65-6, Tween 80  
9005-70-3, Montanox 85 12441-09-7D, Sorbitan, esters 13397-24-5,  
Gypsum, biological studies 13463-67-7, Titanium dioxide, biological  
studies 14807-96-6, Talcum, biological studies 77466-09-2, Miglyol

840 85595-39-7, Claytöne 40 200013-91-8, N-Hance 3000 225221-64-7,  
Tixogel  
    MP 100 225226-54-0, N-Hance GPX 3196  
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
    (fluidized polymer suspensions of cationic polysaccharides in  
    emollients for personal care compns.)

L18 ANSWER 11 OF 42 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1999:343664 · CAPLUS  
 DOCUMENT NUMBER: 130:356881  
 TITLE: Fluidized polymer suspensions of cationic polysaccharides in polyols and use thereof in preparing personal care compositions  
 INVENTOR(S): Burdick, Charles Lee; Hofman, Hans; Melbouci, Mohand; Debruin, Jacobus Johannes  
 PATENT ASSIGNEE(S): Hercules Incorporated, USA  
 SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9925313	A1	19990527	WO 1998-US24888	19981112
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6093769	A	20000725	US 1997-974189	19971119
AU 9915326	A1	19990607	AU 1999-15326	19981112
EP 1030644	A1	20000830	EP 1998-959546	19981112
R: DE, ES, FR, GB, IT, NL				
PRIORITY APPLN. INFO.:			US 1997-974189	19971119
			WO 1998-US24888	19981112

AB Stable fluidized polymer suspensions contg. cationic polysaccharide, stabilizing agent and water-sol. polyol are disclosed. The preferred cationic polysaccharides are cationic guar and cationic hydroxypropyl guar. Processes for prep. personal care compns. utilizing the fluidized polymer suspensions are also disclosed. Using the fluidized polymer suspensions in the processes provides advantages of more rapid dissoln. and avoidance of lumps and gels when compared to using dry, powd.

cationic polysaccharides. A stable fluid dispersion was obtained with a viscosity of 4500 cps by dispersing 1.7 parts of Aerosil 200 silica into 55.8 parts of PEG 400 and adding 42.5 parts of N-Hance 3000 cationic guar gum

REFERENCE COUNT: 8  
 REFERENCE(S):  
 (1) Akeshi, A; Powdered or granular hand cleansers 1986, 26, CAPLUS  
 (2) Demasi; US 4453979 A 1984 CAPLUS  
 (3) Lion Corp; JP 54135234 A 1979  
 (4) Rhone-Poulenc Chimie; WO 9749376 A 1997  
 (8) Young, T; US 5080717 A 1992 CAPLUS  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Stable fluidized polymer suspensions contg. cationic polysaccharide, stabilizing agent and water-sol. polyol are disclosed. The preferred cationic polysaccharides are cationic guar and cationic hydroxypropyl guar. Processes for prep. personal care compns. utilizing the fluidized polymer suspensions are also disclosed. Using the fluidized polymer

suspensions in the processes provides advantages of more rapid dissoln. and avoidance of lumps and gels when compared to using dry, powd.

cationic

polysaccharides. A stable fluid dispersion was obtained with a viscosity of 4500 cps by dispersing 1.7 parts of Aerosil 200 silica into 55.8 parts of PEG 400 and adding 42.5 parts of N-Hance 3000 cationic guar gum

ST polymer suspension cationic polysaccharide polyol cosmetic; hair prepn deodorant sunscreen polymer suspension

IT Antiperspirants

Cationic surfactants

Conditioning shampoos

Cosmetics

Deodorants

Hair conditioners

Hair dyes

Nonionic surfactants

Pigments (nonbiological)

Shampoos

Stabilizing agents

Sunscreens

Surfactants

(fluidized polymer suspensions of cationic polysaccharides in polyols for personal care compns.)

IT Anionic polyelectrolytes

Cationic polyelectrolytes

(hair styling; fluidized polymer suspensions of cationic polysaccharides in polyols for personal care compns.)

IT Hair gels

(styling; fluidized polymer suspensions of cationic polysaccharides in polyols for personal care compns.)

IT 9000-30-0, Guar gum 39421-75-5, Hydroxypropyl guar

39465-11-7, Hydroxyethyl guar

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cationic; fluidized polymer suspensions of cationic polysaccharides

in

polyols for personal care compns.)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6,

1,2-Propanediol, biological studies 79-10-7D, Acrylic acid, esters,

polymers 107-21-1, 1,2-Ethanediol, biological studies 111-46-6,

Diethylene glycol, biological studies 471-34-1, Calcium carbonate,

biological studies 7631-86-9, Silica, biological studies

9004-32-4 9004-34-6D, Cellulose, ethers 9004-62-0,

Hydroxyethyl cellulose 9004-64-2, Klucel H

13397-24-5, Gypsum, biological studies 13463-67-7, Titanium dioxide,

biological studies 14807-96-6, Talcum, biological studies 25322-68-3

25322-69-4, Polypropylene glycol 71329-50-5, Jaguar C 162 92183-41-0,

Celquat H 100 200013-91-8, N-Hance 3000 225220-64-4, N-Hance 3196

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(fluidized polymer suspensions of cationic polysaccharides in polyols for personal care compns.)

L18 ANSWER 12 OF 42 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1999:253715 CAPLUS  
DOCUMENT NUMBER: 130:329015  
TITLE: Hair dyes  
INVENTOR(S): Grit, Mustafa; Bistram, Vera  
PATENT ASSIGNEE(S): Kao Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11106320	A2	19990420	JP 1997-283189	19971001

OTHER SOURCE(S): MARPAT 130:329015

AB Hair dyes showing excellent hair dyeing and photoresistant effects comprise [a] cationic direct dyes 0.0001-2.5, [b] anionic UV absorbents 0.1-5, [c] amine oxide or other surfactants 0.1-10 wt.%. A hair dye [color rinse] contained 1,2-propanediol 3.0, ceteystearyl alc. 1.25, hydroxyethyl cellulose 1.0, silicone oil 0.2, methylparaben 0.2, cetyltrimethylammonium chloride 0.2, dicetyltrimethylammonium chloride 0.5, henna exts. 0.5, perfumes 0.5, benzophenone 0.4, lauryldimethylamine oxide 1.00, basic red 76 0.1, basic blue 99 0.01, citric acid and water to 100 parts.

TI Hair dyes

AB Hair dyes showing excellent hair dyeing and photoresistant effects comprise [a] cationic direct dyes 0.0001-2.5, [b] anionic UV absorbents 0.1-5, [c] amine oxide or other surfactants 0.1-10 wt.%. A hair dye [color rinse] contained 1,2-propanediol 3.0, ceteystearyl alc. 1.25, hydroxyethyl cellulose 1.0, silicone oil 0.2, methylparaben 0.2, cetyltrimethylammonium chloride 0.2, dicetyltrimethylammonium chloride 0.5, henna exts. 0.5, perfumes 0.5, benzophenone 0.4, lauryldimethylamine oxide 1.00, basic red 76 0.1, basic blue 99 0.01, citric acid and water to 100 parts.

ST hair dye UV absorbent surfactant

IT Glycosides  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (C12-14 alkyl poly-; hair dyes)

IT Direct dyes  
(cationic; hair dyes)

IT Hair dyes  
Surfactants  
UV stabilizers  
(hair dyes)

IT Amine oxides  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (hair dyes)

IT 112-02-7, Cetyltrimethylammonium chloride 119-61-9, Benzophenone,

biological studies 1643-20-5, Lauryldimethylamine oxide 1812-53-9,  
Dicetyltrimethylammonium chloride 2871-01-4, HC red 3 9002-92-0,  
Laureth 26381-41-**Basic** brown 16 27306-90-7 23-13-7,  
**Basic** blue 99 68391-30-0, **Basic** red 76 68391-31-1,  
**Basic** yellow 57 90453-60-4  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or  
chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(hair dyes)

L18 ANSWER 19 OF 42 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1999:224520 CAPLUS  
DOCUMENT NUMBER: 130:316423  
TITLE: Permanent or semipermanent hair dyes  
INVENTOR(S): Grit, Mustaha; Mehring, Hartmut  
PATENT ASSIGNEE(S): Kao Corp., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11092348	A2	19990406	JP 1997-261598	19970926

OTHER SOURCE(S): MARPAT 130:316423

AB Permanent or semipermanent hair dyes having hair -conditioning effects comprise [a] cationic direct dyes 0.0001-2.5 and [b] .gtoreq.1 cationic plant protein hydrolyzates and/or quaternary ammonium compds. 0.1-10 wt.%. A hair dye contained 1,2-propanediol 3.0, cetyl stearyl ether 1.25, hydroxyethylcellulose 1.0, silicone oil 0.2, methylparaben 0.2, dicetyltrimethylammonium chloride 0.5, nut exts. 1.0, chamomile exts. 1.0, perfumes 0.5, benzophenone-4 0.6, gluadin TM 1.0, basic red 2 0.2, citric acid and water to 100 wt.%.

TI Permanent or semipermanent hair dyes

AB Permanent or semipermanent hair dyes having hair -conditioning effects comprise [a] cationic direct dyes 0.0001-2.5 and [b] .gtoreq.1 cationic plant protein hydrolyzates and/or quaternary ammonium compds. 0.1-10 wt.%. A hair dye contained 1,2-propanediol 3.0, cetyl stearyl ether 1.25, hydroxyethylcellulose 1.0, silicone oil 0.2, methylparaben 0.2, dicetyltrimethylammonium chloride 0.5, nut exts. 1.0, chamomile exts. 1.0, perfumes 0.5, benzophenone-4 0.6, gluadin TM 1.0, basic red 2 0.2, citric acid and water to 100 wt.%.

ST hair dye cationic plant protein hydrolyzate

IT Protein hydrolyzates  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(Gluadin TM; permanent or semipermanent hair dyes)

IT Protein hydrolyzates  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(cationic plant; permanent or semipermanent hair dyes)

IT Direct dyes  
(cationic; permanent or semipermanent hair dyes)

IT Hair dyes  
(permanent or semipermanent hair dyes)

IT Quaternary ammonium compounds, biological studies  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
(permanent or semipermanent hair dyes)

IT 477-73-6, Basic red 2 39393-38-9, C.I. Basic Red 16 141890-30-4  
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

L18 ANSWER 20 OF 42 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1999:147852 CAPLUS  
 DOCUMENT NUMBER: 130:186992  
 TITLE: Compounds for coloring and tinting of human hair  
 INVENTOR(S): Lorenz, Heribert; Wagner, Helmar R.; Kawamata, Akira  
 PATENT ASSIGNEE(S): Goldwell G.m.b.H., Germany  
 SOURCE: Ger. Offen., 8 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19735851	A1	19990225	DE 1997-19735851	19970819

OTHER SOURCE(S): MARPAT 130:186992

AB Hair dye compns. contg. .gtoreq.1 cationic direct dye and .gtoreq.1 fatty amide R1C(O)N[(CH<sub>2</sub>)<sub>n</sub>OH]2CH(OH)CH<sub>2</sub>OR<sub>2</sub> (I; R<sub>1</sub>, R<sub>2</sub> = C<sub>10-22</sub> alkyl or alkenyl; n = 1-3) show both good hair-coloring and good hair-conditioning activity. Thus, a tinting conditioner was prep'd. contg. 1,2-propanediol 3.00, cetostearyl alc. 1.25, hydroxyethylcellulose 1.00, silicone oil 0.20, methylparaben 0.20, cetyltrimethylammonium chloride 0.20, dicetyltrimethylammonium chloride 0.50, henna ext. 0.50, perfume 0.50, benzophenone-4 0.40, lauryldimethylamine oxide 1.00, I (R<sub>1</sub> = C<sub>16</sub>H<sub>34</sub>, R<sub>2</sub> = C<sub>15</sub>H<sub>31</sub>, n = 2) (II) nanoemulsion (contg. lecithin 5.0, II 4.0, glycerin 8.0, Avocadin 8.0, EtOH 10.0, diisopropyl adipate 2.5, and H<sub>2</sub>O to 100.0 wt.%) 0.50, Basic Red 76 0.10, basic blue 0.01, citric acid, and H<sub>2</sub>O to 100.00 wt.%.

TI Compounds for coloring and tinting of human hair

AB Hair dye compns. contg. .gtoreq.1 cationic direct dye and .gtoreq.1 fatty amide R1C(O)N[(CH<sub>2</sub>)<sub>n</sub>OH]2CH(OH)CH<sub>2</sub>OR<sub>2</sub> (I; R<sub>1</sub>, R<sub>2</sub> = C<sub>10-22</sub> alkyl or alkenyl; n = 1-3) show both good hair-coloring and good hair-conditioning activity. Thus, a tinting conditioner was prep'd. contg. 1,2-propanediol 3.00, cetostearyl alc. 1.25, hydroxyethylcellulose 1.00, silicone oil 0.20, methylparaben 0.20, cetyltrimethylammonium chloride 0.20, dicetyltrimethylammonium chloride 0.50, henna ext. 0.50, perfume 0.50, benzophenone-4 0.40, lauryldimethylamine oxide 1.00, I (R<sub>1</sub> = C<sub>16</sub>H<sub>34</sub>, R<sub>2</sub> = C<sub>15</sub>H<sub>31</sub>, n = 2) (II) nanoemulsion (contg. lecithin 5.0, II 4.0, glycerin 8.0, Avocadin 8.0, EtOH 10.0, diisopropyl adipate 2.5, and H<sub>2</sub>O to 100.0 wt.%) 0.50, Basic Red 76 0.10, basic blue 0.01, citric acid, and H<sub>2</sub>O to 100.00 wt.%.

ST hair tint conditioner fatty amide; dye hair conditioner fatty amide

IT Hair conditioners

  Hair dyes  
     (compds. for coloring and tinting of human hair)

IT Fatty amides

  RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
     (compds. for coloring and tinting of human hair)

IT 220656-43-9

  RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(compds. for coloring and tinting of human hair)

L18 ANSWER 21 OF 42 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1998:693025 CAPLUS  
DOCUMENT NUMBER: 130:17080  
TITLE: Semi-permanent hair dyes  
INVENTOR(S): Kojima, Atsushi  
PATENT ASSIGNEE(S): Hoyu K. K., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 10287535	A2	19981027	JP 1997-113500	19970414
AB	Semi-permanent hair dyes showing appropriate hair dying and conditioning effects contain: [a] arom alcs., [b] cationic compds., [c] water-sol. anionic polymers, [d] direct dyes and [e] carboxylic acids.				
TI	Semi-permanent hair dyes				
AB	Semi-permanent hair dyes showing appropriate hair dying and conditioning effects contain: [a] arom alcs., [b] cationic compds., [c] water-sol. anionic polymers, [d] direct dyes and [e] carboxylic acids.				
ST	semipermanent hair dye alc cationic compd; anionic compd semipermanent hair dye				
IT	Cationic polyelectrolytes Direct dyes Hair dyes (semipermanent hair dyes)				
IT	Acrylic polymers, biological studies Aralkyl alcohols Carboxylic acids, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (semipermanent hair dyes)				
IT	Anionic polyelectrolytes (water-sol.; semipermanent hair dyes)				
IT	9004-34-6D, Cellulose, derivs. RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (cationic; semipermanent hair dyes)				
IT	50-21-5, Lactic acid, biological studies 100-51-6, Benzenemethanol, biological studies 112-03-8, Stearyltrimethylammonium chloride 633-96-5, Japan orange 205 7398-69-8, Dimethyldiallylammonium chloride 9003-04-7, Polyacrylic acid sodium salt 9004-32-4 9004-62-0, Hydroxyethyl cellulose 25549-84-2, Polyacrylic acid sodium salt 92183-41-0 142905-80-4 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (semipermanent hair dyes)				

L18 ANSWER 40 OF 42 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1987:561365 CAPLUS  
 DOCUMENT NUMBER: 107:161365  
 TITLE: Hair dye compositions  
 INVENTOR(S): Houillebecq, Terry Francis; Day, Martin Edwin;  
 Wilkins, Anne Lilian  
 PATENT ASSIGNEE(S): Beecham Group PLC, UK  
 SOURCE: Brit. UK Pat. Appl., 7 pp.  
 CODEN: BAXXDU  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2173515	A1	19861015	GB 1985-9409	19850412
GB 2173515	B2	19890118		

AB Hair dyes are comprised of a direct **dye**, a **cationic siloxane surfactant**, a hydroxy-contg. siloxane, and a liq. vehicle. The compns. provide increased color retention to the hair. Direct dyes (present at 0.01-10 wt. % concn.) are chosen from anthraquinone, azo, nitro, **basic**, triarylmethane, or disperse **dyes**. Cationic siloxanes are chosen from aminosiloxanes of formula  $XSiMe2O(SiMe2O)m[YSi(RNH(CH2)2NH2)]nSiMe2X$  (X,

Y = OH or C1-6-alkyl, preferably Me; R = C1-8-alkylene; m, n = 1-100) and quaternary ammonium siloxanes of formula

$XSiMe2O(SiMe2O)m[MeSi((CH2)3OCH2C HOHCH2NMe2R1.A)O]nSiMe2X$  (X, Y are defined above, R1 = long-chain alkyl; m, n = 1-100; A = Cl, Br, or I). The compns. can contain 0.1-5 wt. % of an addnl. surfactant. An aq. hair dye was prep'd. contg. perfume, preservatives, hydroxypropyl guar **gum** 0.7, amodimethicone-Tallotrimonium chloride (a quaternary ammonium siloxane)-Nonoxynol 10 1.0, Dow Corning DF 11884 (hydroxy-contg. siloxane)

0.5, cetyl alc. 1.5, glycerin 4.5, N-(2-hydroxyethyl)-2-nitro-p-phenylenediamine 0.4, and 4-nitro-o-phenylenediamine 0.2 wt. %. Hair washed several times over several days with the above compn. retained more color than hair washed with the above compn. but not contg. the hydroxy silicone.

TI Hair dye compositions

AB Hair dyes are comprised of a direct **dye**, a **cationic siloxane surfactant**, a hydroxy-contg. siloxane, and a liq. vehicle. The compns. provide increased color retention to the hair. Direct dyes (present at 0.01-10 wt. % concn.) are chosen from anthraquinone, azo, nitro, **basic**, triarylmethane, or disperse **dyes**. Cationic siloxanes are chosen from aminosiloxanes of formula  $XSiMe2O(SiMe2O)m[YSi(RNH(CH2)2NH2)]nSiMe2X$  (X,

Y = OH or C1-6-alkyl, preferably Me; R = C1-8-alkylene; m, n = 1-100) and quaternary ammonium siloxanes of formula

$XSiMe2O(SiMe2O)m[MeSi((CH2)3OCH2C HOHCH2NMe2R1.A)O]nSiMe2X$  (X, Y are defined above, R1 = long-chain alkyl; m, n = 1-100; A = Cl, Br, or I). The compns. can contain 0.1-5 wt. % of an addnl. surfactant. An aq. hair dye was prep'd. contg. perfume, preservatives, hydroxypropyl guar **gum** 0.7, amodimethicone-Tallotrimonium chloride (a quaternary ammonium

siloxane)-Nonoxynol 10 1.0, Dow Corning DF 11884 (hydroxy-contg.  
siloxane)  
0.5, cetyl alc. 1.5, glycerin 4.5, N-(2-hydroxyethyl)-<sup>2</sup>-nitro-p-  
phenylenediamine 0.4, and 4-nitro-o-phenylenediamine 0.2 wt. %.  
Hair washed several times over several days with the above compn.  
retained more color than hair washed with the above compn. but  
not contg. the hydroxy silicone.

ST siloxane hair dye color retention; hydroxy siloxane hair  
dye; amino siloxane hair dye; quaternary ammonium siloxane  
hair dye

IT Siloxanes and Silicones, compounds  
RL: BIOL (Biological study)  
([(aminoethyl)amino]propyl hydroxy, di-Me, hair dyes contg.)

IT Quaternary ammonium compounds, biological studies  
RL: BIOL (Biological study)  
(alkyltrimethyl, tallow, chlorides, siloxanes contg., hair  
dyes contg.)

IT Siloxanes and Silicones, biological studies  
RL: BIOL (Biological study)  
(amino-contg., hair dyes)

IT Hair preparations  
(dyes, amino- and hydroxy-functionalized siloxanes as, for enhancing  
color fastness)

IT Siloxanes and Silicones, biological studies  
RL: BIOL (Biological study)  
(hydroxy, hair dyes contg.)

L18 ANSWER 35 OF 42 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1990:465058 CAPLUS  
DOCUMENT NUMBER: 113:65058  
TITLE: **Hair dyes comprising cationic compounds and ethoxylated fatty alcohols**  
INVENTOR(S): Doerfel, Klaus; Guenther, Herbert; Raduechel, Manfred;  
PATENT ASSIGNEE(S): Rieger, Christa; Theusner, Maria  
SOURCE: VEB Chemisches Werk Miltitz, Ger. Dem. Rep.  
Ger. (East), 4 pp.  
CODEN: GEXXA8  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	DD 271219	A3	19890830	DD 1987-306712	19870907
AB	Liq., gel, or emulsion <b>hair dyes</b> comprise water-sol. <b>cationic surfactants and/or cationic polymers, cationic dyes, highly-ethoxylated fatty alcs., and fatty acid di- and/or polydiethanolamides. A hair dye comprised Basic Brown-17 0.020, Basic Red-76 0.013, Basic Blue-99 0.100, hydroxyethyl cellulose 0.100, PEG 15 tallow polyamide 2.300, Polyquaternium-6 0.300, lauric acid diethanolamide 1.300, ethoxylated stearyl alc. 14.000, 1,2-propylene glycol 5.00, and water to 100.00 g.</b>				
TI	<b>Hair dyes comprising cationic compounds and ethoxylated fatty alcohols</b>				
AB	Liq., gel, or emulsion <b>hair dyes</b> comprise water-sol. <b>cationic surfactants and/or cationic polymers, cationic dyes, highly-ethoxylated fatty alcs., and fatty acid di- and/or polydiethanolamides. A hair dye comprised Basic Brown-17 0.020, Basic Red-76 0.013, Basic Blue-99 0.100, hydroxyethyl cellulose 0.100, PEG 15 tallow polyamide 2.300, Polyquaternium-6 0.300, lauric acid diethanolamide 1.300, ethoxylated stearyl alc. 14.000, 1,2-propylene glycol 5.00, and water to 100.00 g.</b>				
ST	<b>hair cationic dye surfactant polymer; ethoxylated fatty alc hair dye</b>				
IT	<b>Surfactants</b> (cationic, hair dyes contg.)				
IT	Amides, biological studies RL: BIOL (Biological study) (coco, N,N-bis(hydroxyethyl), hair dyes contg.)				
IT	<b>Hair preparations</b> (dyes, surfactants for)				
IT	Alcohols, compounds RL: BIOL (Biological study) (fatty, ethoxylated, hair dyes contg.)				
IT	Amides, biological studies RL: BIOL (Biological study) (fatty, N-(hydroxyethyl), hair dyes contg.)				
IT	Amides, compounds				

RL: BIOL (Biological study)  
(poly-, tallow, ethoxylated, hair dyes contg.)  
IT 93-82-3, Stearic acid diethanolamide 107-64-2 12-10-1 9005-00-9,  
Ethoxylated stearyl alcohol 18684-11-2, Stearyl trimethylammonium  
methylsulfate 26062-79-3, Polyquaternium-6 68123-13-7, **Basic**  
Blue 99 68391-30-0, **Basic** red 76 68391-31-1, **Basic**  
yellow 57 128482-55-3, Disteareth-6 Dimonium Chloride 176742-32-8,  
**Basic** brown 17  
RL: BIOL (Biological study)  
(hair dyes contg.)

L18 ANSWER 29 OF 42 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1996:369791 CAPLUS  
 DOCUMENT NUMBER: 125:41426  
 TITLE: Hair coloring shampoo compositions containing polyoxyethylene alkyl ether-type nonionic surfactants  
 INVENTOR(S): Sakuma, Risa; Yahagi, Kazuyuki  
 PATENT ASSIGNEE(S): Kao Corporation, Japan  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 711542	A1	19960515	EP 1995-116559	19951020
R: DE, FR, GB				
JP 08119838	A2	19960514	JP 1994-255044	19941020
JP 1994-255044 19941020				

PRIORITY APPLN. INFO.: MARPAT 125:41426

AB A coloring shampoo compn. comprises (A) 5 to 50% by wt. of a polyoxyethylene alkyl ether-type nonionic surfactant  $R1O(CH2CH2O)_nH$  ( $R1 = C10-20$  alkyl or alkenyl;  $n = 11-30$ ); and (B) 0.01 to 10% by wt. of a **basic dye**. The coloring shampoo compn. exhibits an intense and long-lasting hair-dyeing effect and an excellent detergency. It also causes little irritation and imparts a good touch to the hair without giving any squeak feel during shampooing. A shampoo contained polyoxyethylene-(15)-lauryl ether 10.00, laurylhydroxysulfobetaine 1.00, alkylglucoside 2.00, decanoic acid monoglyceride 3.00, cationized **cellulose** 0.30, **hydroxyethyl cellulose** 0.10, silicone emulsion 1.00, **basic dye** Red no 76 0.08, **basic dye** Blue no 99 0.01, **basic dye** Yellow no 57 0.01, pH regulator q.s., perfume q.s., and water q.s. 100.0%.

TI Hair coloring shampoo compositions containing polyoxyethylene alkyl ether-type nonionic surfactants

AB A coloring shampoo compn. comprises (A) 5 to 50% by wt. of a polyoxyethylene alkyl ether-type nonionic surfactant  $R1O(CH2CH2O)_nH$  ( $R1 = C10-20$  alkyl or alkenyl;  $n = 11-30$ ); and (B) 0.01 to 10% by wt. of a **basic dye**. The coloring shampoo compn. exhibits an intense and long-lasting hair-dyeing effect and an excellent detergency. It also causes little irritation and imparts a good touch to the hair without giving any squeak feel during shampooing. A shampoo contained polyoxyethylene-(15)-lauryl ether 10.00, laurylhydroxysulfobetaine 1.00, alkylglucoside 2.00, decanoic acid monoglyceride 3.00, cationized **cellulose** 0.30, **hydroxyethyl cellulose** 0.10, silicone emulsion 1.00, **basic dye** Red no 76 0.08, **basic dye** Blue no 99 0.01, **basic dye** Yellow no 57 0.01, pH regulator q.s., perfume q.s., and water q.s. 100.0%.

ST hair coloring shampoo polyoxyethylene nonionic surfactant

IT Betaines

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (carbo-; hair coloring shampoo compns. contg. polyoxyethylene alkyl ether-type nonionic surfactants)

IT Amides, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(N,N-bis(hydroxyalkyl), hair coloring shampoo compns. contg.  
polyoxyethylene alkyl ether-type nonionic surfactants)

IT Amines, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(alkyldimethyl, N-oxides, hair coloring shampoo compns.  
contg. polyoxyethylene alkyl ether-type nonionic surfactants)

IT Oligosaccharides  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(di-, alkyl-; hair coloring shampoo compns. contg.  
polyoxyethylene alkyl ether-type nonionic surfactants)

IT Hair preparations  
(dyes, hair coloring shampoo compns. contg. polyoxyethylene  
alkyl ether-type nonionic surfactants)

IT Glycerides, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(mono-, hair coloring shampoo compns. contg. polyoxyethylene  
alkyl ether-type nonionic surfactants)

IT Surfactants  
(nonionic, hair coloring shampoo compns. contg.  
polyoxyethylene alkyl ether-type nonionic surfactants)

IT Betaines  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(sulfo-, laurylhydroxy; hair coloring shampoo compns. contg.  
polyoxyethylene alkyl ether-type nonionic surfactants)

IT 9002-92-0, Polyoxyethylene lauryl ether 26402-22-2, Decanoic acid  
monoglyceride  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(hair coloring shampoo compns. contg. polyoxyethylene alkyl  
ether-type nonionic surfactants)

L18 ANSWER 26 OF 42 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1997:211140 CAPLUS  
 DOCUMENT NUMBER: 126:203553  
 TITLE: Composition for dyeing of human hair comprising hydroxy C2-4 alkyl guar gum  
 INVENTOR(S): Misu, Daisuke  
 PATENT ASSIGNEE(S): Kao Corporation, Japan  
 SOURCE: Eur. Pat. Appl., 5 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 756861	A2	19970205	EP 1996-112012	19960725
EP 756861	A3	19990616		
R: DE, FR, GB, NL				
DE 19527978	A1	19970206	DE 1995-19527978	19950731
DE 19527978	C2	19980820		
JP 09100223	A2	19970415	JP 1996-200184	19960730
DE 1995-19527978 19950731				

PRIORITY APPLN. INFO.:

AB The dyeing effect, i.e. the color absorption, and the stability of a compn. for dyeing of human hair comprising at least one direct dyestuff in an aq. or aq.-alc. medium are considerably improved by the addn. of 0.1% to 7.5% by wt., calcd. to the total compn., of at least one hydroxy C2-4 alkyl guar gum or the quaternary salts thereof, particularly from 0.25% to 2.5% by wt. of hydroxypropyl guar gum (I). A hair dye compn. contained I 1.00, Polyquaternium 7, 0.80, cocamidopropyl betaine 1.00, dimethicone copolyol 0.10, ethanol 5.00, perfume 0.20, Basic Blue-99 0.066, Basic Brown-17 0.050, Disperse Blakc-9 0.004, Disperse Blue-3 0.015, HC Red No.-3 0.060, and water q.s. 100.00.

TI Composition for dyeing of human hair comprising hydroxy C2-4 alkyl guar gum

AB The dyeing effect, i.e. the color absorption, and the stability of a compn. for dyeing of human hair comprising at least one direct dyestuff in an aq. or aq.-alc. medium are considerably improved by the addn. of 0.1% to 7.5% by wt., calcd. to the total compn., of at least one hydroxy C2-4 alkyl guar gum or the quaternary salts thereof, particularly from 0.25% to 2.5% by wt. of hydroxypropyl guar gum (I). A hair dye compn. contained I 1.00, Polyquaternium 7, 0.80, cocamidopropyl betaine 1.00, dimethicone copolyol 0.10, ethanol 5.00, perfume 0.20, Basic Blue-99 0.066, Basic Brown-17 0.050, Disperse Blakc-9 0.004, Disperse Blue-3 0.015, HC Red No.-3 0.060, and water q.s. 100.00.

ST hair dye hydroxyalkyl guar gum

IT Cationic dyes

Direct dyes

Hair dyes

(compn. for dyeing of human hair comprising hydroxy C2-4 alkyl guar gum)

IT 2475-46-9, Disperse blue 3 2871-01-4, Hc red no 3 9000-30-0D, Guar gum, hydroxy C2-4 alkyl derivs. 26381-41-9, Basic brown 16 39421-75-5, Hydroxypropyl guar gum 65497-29-2 68123-13-7, Basic blue 99 68391-30-0, Basic red 76 68391-31-1, Basic yellow 57 176742-32-8, Basic brown

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)

(compn. for dyeing of human hair comprising hydroxy  
C2-4 alkyl guar gum)

L18 ANSWER 22 OF 42 CAPLUS COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 1998:176141 CAPLUS  
DOCUMENT NUMBER: 128:208778  
TITLE: Cationic agent for coloring human hair  
INVENTOR(S): Grit, Mustafa; Moehring, Hartmut  
PATENT ASSIGNEE(S): Kao Corp., Japan  
SOURCE: Ger., 6 pp.  
CODEN: GWXXAW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19640831	C1	19980305	DE 1996-19640831	19961002
EP 834303	A2	19980408	EP 1997-116359	19970919
EP 834303	A3	19980819		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  
PRIORITY APPLN. INFO.: DE 1996-19640792 19961002  
DE 1996-19640831 19961002

OTHER SOURCE(S): MARPAT 128:208778  
AB A hair dye compn. with excellent coloring capacity and conditioning activity contains (a) a cationic direct dye 0.0001-2.5 and (b) a cationically derivatized plant protein hydrolyzate or quaternary ammonium compd. RCONHCH<sub>2</sub>CH<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>OH)CH<sub>2</sub>CH(OH)CH<sub>2</sub>N<sup>+</sup>Me<sub>3</sub> X<sup>-</sup> [I; R = C<sub>8</sub>-20 alk(en)yl; X<sup>-</sup> = anion]. Thus, a dye compn. contg. 1,2-propanediol 3.00, cetyl stearyl alc. 1.25, hydroxyethylcellulose 1.00, silicone oil 0.20, methylparaben 0.20, cetyltrimethylammonium chloride 0.20, dicetyltrimethylammonium chloride 0.50, henna ext. 1.00, chamomile ext. 1.00, perfume 0.50, benzophenone-4 0.60, I (R = C<sub>13</sub>H<sub>27</sub>, X = Cl), Basic Red 2, citric acid (to adjust pH), and water to 100.00 parts conferred a dark red color.  
TI Cationic agent for coloring human hair  
AB A hair dye compn. with excellent coloring capacity and conditioning activity contains (a) a cationic direct dye 0.0001-2.5 and (b) a cationically derivatized plant protein hydrolyzate or quaternary ammonium compd. RCONHCH<sub>2</sub>CH<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>OH)CH<sub>2</sub>CH(OH)CH<sub>2</sub>N<sup>+</sup>Me<sub>3</sub> X<sup>-</sup> [I; R = C<sub>8</sub>-20 alk(en)yl; X<sup>-</sup> = anion]. Thus, a dye compn. contg. 1,2-propanediol 3.00, cetyl stearyl alc. 1.25, hydroxyethylcellulose 1.00, silicone oil 0.20, methylparaben 0.20, cetyltrimethylammonium chloride 0.20, dicetyltrimethylammonium chloride 0.50, henna ext. 1.00, chamomile ext. 1.00, perfume 0.50, benzophenone-4 0.60, I (R = C<sub>13</sub>H<sub>27</sub>, X = Cl), Basic Red 2, citric acid (to adjust pH), and water to 100.00 parts conferred a dark red color.  
ST quaternary ammonium hair direct dye  
IT Plant (Embryophyta)  
Wheat  
(cationic protein hydrolyzates from; cationic agent for coloring human hair)  
IT Protein hydrolyzates  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cationic, from plants; cationic agent for coloring human hair  
)  
IT **Hair dyes**  
(direct, cationic; cationic agent for coloring  
human hair)  
IT 51855-80-2 188571-05-3, Gluadin WQ  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
(Uses)  
(cationic agent for coloring human hair)